

ELECTRONIC TUBE REFERENCE

2BN4A

Voltage - Triode (single high frequency) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

Medium-mu miniature triode used as the RF amplifier in grid-drive VHF television tuner circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7EG	BASE PINS	7
NOMINAL HEATER	2.35 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7EG - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – K	A	K – Cathode	CONNECTED
PIN2 – G1	A	G1 – Control Grid	CONNECTED
PIN3 – H	–	H – Heater	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – P	A	P – Plate (Anode)	CONNECTED
PIN6 – K	A	K – Cathode	CONNECTED
PIN7 – G1	A	G1 – Control Grid	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	5400 Ω
TRANSCONDUCTANCE	0.008 S
AMPLIFICATION FACTOR	43
MAXIMUM PLATE VOLTAGE	275 V
MAXIMUM PLATE DISSIPATION	2.2 W
MAXIMUM CATHODE CURRENT	22 mA
<i>VHF grounded-grid RF amplifier triode.</i>	

Medium-mu miniature triode used as an RF amplifier in grid-drive VHF television tuner circuits.



SOURCE OPERATING CONDITIONS

1961 Tung Sol

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1961 TUNG SOL

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	150 V	ClassA
Heater Warmup Time	11 s	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	3 mA	ClassA
TransconductancePublished	8000 μ S	ClassA



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Westinghouse Data Book

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1965 WESTINGHOUSE DATA BOOK

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	2.35 V	—
Heater Current	600 mA	—
Grid-Plate Capacitance Shielded	1.2 pF	—
Input Capacitance Shielded	3.2 pF	—
Output Capacitance Shielded	1.4 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	275 V	—
Maximum Plate Dissipation	2.2 W	—
Maximum Cathode Current	22 mA	—
Maximum Grid Circuit Resistance	0.5 Mohm	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 1 of 4

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 1 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	1.2 pF	Section1
Input capacitance	3.2 pF	Section1
Output capacitance	1.4 pF	Section1
Heater-to-cathode capacitance	2.8 pF	Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater warm-up time	11 s	Section1
Amplification factor	43	Section1
Plate resistance	5400 Ω	Section1
Transconductance	8000 μS	Section1

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	150 V	ClassA
Cathode-bias resistor	220 Ω	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	9 mA	ClassA



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1975 RCA RC30

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1975 RCA RC30

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heat Voltage (ac/dc) 2.35 3	6.3 V	Published in approved target datasheet entry
Heater Current 0.6 0.45	200 mA	Published in approved target datasheet entry
Plate Voltage	275 V	Published in approved target datasheet entry
Grid Voltage, Positive-bias value	0 V	Published in approved target datasheet entry
Plate-Supply Voltage	150 V	Published in approved target datasheet entry
Cathode-Bias Resistor	220 ohm	Published in approved target datasheet entry
Plate Resistance (Approx.)	5400 ohm	Published in approved target datasheet entry
Transconductance	7700 μ S	Published in approved target datasheet entry
Grid-Circuit Resistance	0.5 Mohm	Published in approved target datasheet entry

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Cathode and Heater	3.2 pF	Published in approved target datasheet entry
Plate to Cathode and Heater	1.4 pF	Published in approved target datasheet entry

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	9 mA	Published in approved target datasheet entry